



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D119-796-151
Job Sheet 183800



Part No: D119-796-151

Job Qty: 1 pcs

Part Name: Fwd Crosstube Installation With Step (No Hardware)



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 9/26/18

Job Tracking No:

Due Date: 10/31/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG D119-796-151 REV E, IIN-D119-796 REV F IPP REV:A 14.09.09 NEW ISSUE DD VERF:JLM IPP
REV:B 14.11.19 AS PER REV.C DD VERF:JLM IPP REV:C 14.12.09 AS PER REV.PC6 DD VERF:JLM IPP
REV :D 15-02-11 AS PER REV D JLM VERIFIED BY:DD IPP REV:E 17.12.11 REMOVE PICK KIT DD
VERF:DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
130	Crosstubes - 1	1 pcs	10/31/18		0.00	0.49	Crosstubes - 1		
							Crosstubes - 2		
							Crosstubes - 3		
							Crosstubes - 4		• Adj 19-4-8
140	QC 5	1 pcs	10/31/18		0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
							QC 5 - 40		
145	DC - 1 - B4B	1 pcs	10/31/18		0.00	0.00	DC - 1 - B4B		
							DC - 2 - B4B		NR
150	Packaging 3-1 - Stock - B4B	1 pcs	10/31/18		0.00	0.00	Packaging 3 - 1 - B4B		
							Packaging 3 - 2 - B4B		
							Packaging 3 - 3 - B4B		
							Packaging 3 - 4 - B4B		
							Packaging 3 - 5 - B4B		
							Packaging 3 - 6 - B4B		

DAS
APR 08 2019 68
9-89



DART Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 813 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S170455



Part: D119-796-151

Job No: 183800

Serial No/Batch: S170455

Revision: E/F

Inspector:

Exp Date:

Instructions: TC STC SH14-45 - Issued 15/01/28, EASA

				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	LG 50 * AS 19-4-8
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
160	QC 21 - FG	1 pcs	10/31/18	0.00 0.00	QC 21 - FG - 21
					QC 21 - FG - 70
					QC 21 - FG - 53

Part Op 130 - 1- Install step and clamp with the proper position per dwg D119-796-151 ***Torque all clamps to 50 IN-LBS max.***
 Descriptions: 140 - (QC5- Inspect part completeness to step on W/O) ***RE-CHECK TORCQUE ON CLAMP AS PER DWG.***
 145 - Photocopy bluefile and create labels as per PPP D119-796-151 chg 005
 150 - (Identify as per dwg & Stock Location: _____) Identify and pack for shipping as per PPP D119-796-151
 160 - (QC21- Final Inspection - Work Order Release)

Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
D119-796-141	Fwd Crosstube Installation Without Step (No Hardware)	1 pcs (1 ea)	130-Crosstubes - 1	
D5123-3	Clamp Cushion	4 pcs (4 ea)	130-Crosstubes - 1	
D5149-041	Fwd Step Base Assembly	2 pcs (2 ea)	130-Crosstubes - 1	
MS21920-22	Clamp	4 Ea (4 ea)	130-Crosstubes - 1	

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
130-Crosstubes - 1	D119-796-141	1	2	0
	D5123-3	4	193	0
	D5149-041	2	5	0
	MS21920-22	4	41	0

Part Specifications	
Specifications could not be found.	



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D119-796-151
Job Sheet 183800



Part No: D119-796-151

Job Qty: 1 ea

Part Name: Fwd Crosstube Installation With Step (No Hardware)



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 9/26/18

Job Tracking No:

Due Date: 10/31/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG D119-796-151 REV E, IIN-D119-796 REV F IPP REV:A 14.09.09 NEW ISSUE DD VERF:JLM IPP REV:B 14.11.19 AS PER REV.C DD VERF:JLM IPP REV:C 14.12.09 AS PER REV.PC6 DD VERF:JLM IPP REV:D 15-02-11 AS PER REV D JLM VERIFIED BY:DD IPP REV:E 17.12.11 REMOVE PICK KIT DD VERF:DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		10/31/18	0.00	0.00	Start Up Crosstubes-1		
130	Crosstubes	1 pcs		10/31/18	0.00	0.49	Crosstubes-1		
140	QC	1 pcs		10/31/18	0.00	0.00	QC5		
145	DC	1 pcs		10/31/18	0.00	0.00	DC		
150	Packaging	1 pcs		10/31/18	0.00	0.00	Packaging3-1		
160	QC21-FG	1 Ea		10/31/18	0.00	0.00	QC21		

Part Op 130 - 1- Install step and clamp with the proper position per dwg D119-796-151 ***Torque all clamps to 50 IN-LBS max.***
Descriptions: 140 - ***RE-CHECK TORCQUE ON CLAMP AS PER DWG.***
145 - Photocopy bluefile and create labels as per PPP D119-796-151 chg 005
150 - Identify and pack for shipping as per PPP D119-796-151

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D119-796-141	Fwd Crosstube Installation Without Step (No Hardware)	1 Ea (1 ea)	90-Start up Operation	
D5123-3	Clamp Cushion	4 Ea (4 ea)	90-Start up Operation	
D5149-041	Fwd Step Base Assembly	2 Ea (2 ea)	90-Start up Operation	
MS21920-22	Clamp	4 Ea (4 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation 187562	D119-796-141	① 3155800	3	0
	D5123-3	④ 079324	289	0
	D5149-041	② 126767	9	0
	MS21920-22	④ 5104012	107	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

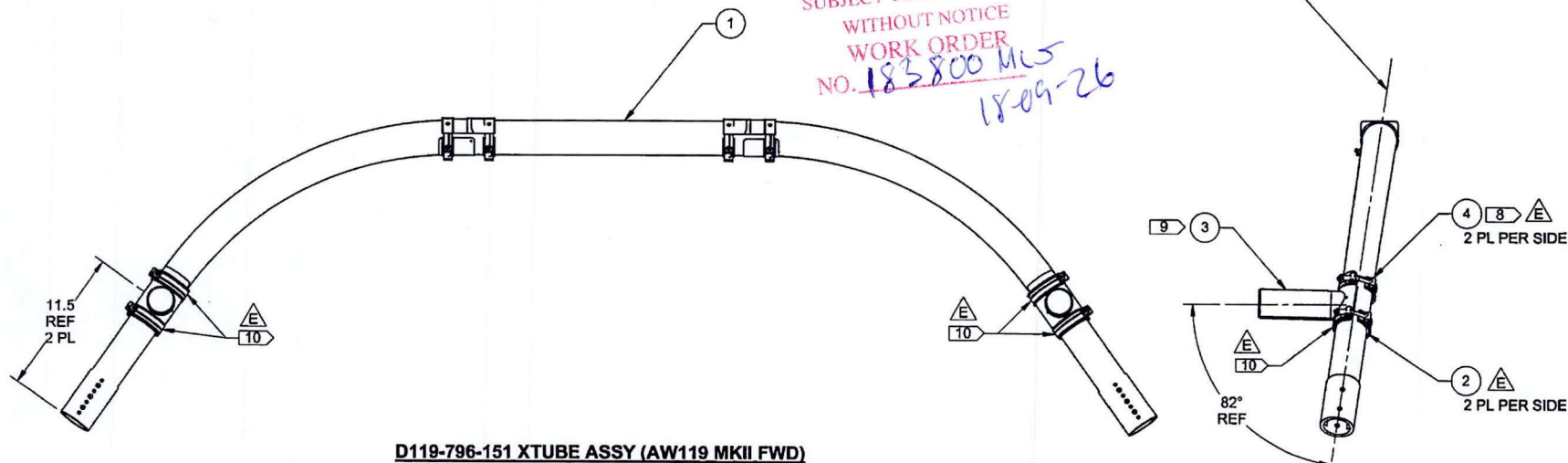
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation		Disposition			

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : ☐			
Misidentified ☐		Past Due ☐					

ITEM	QTY	P/N	DESCRIPTION
	X	D119-796-151	XTUBE ASSY (AW119 MKII FWD)
1	1	D119-796-141	XTUBE ASSY (AW119 MKII FWD)
2	4	D5123-3	CUSHION
3	2	D5149-041	FWD STEP ASSEMBLY
4	4	MS21920-22	CLAMP

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RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 183800 MLC
18-09-26



D119-796-151 XTUBE ASSY (AW119 MKII FWD)

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 METHOD 6.5
- 7) WEIGHT: 20.01 lbs
- 8) TORQUE MS21920-22 CLAMPS TO 50 IN-LBS MAX
- 9) LOCATE STEP USING POST FITTING ON CROSSTUBE
- 10) POSITION MS21920 CLAMPS SECURING THE STEPS AS SHOWN.
THE THREADED PORTION OF THE CLAMP MUST FACE THE SAME DIRECTION AS THE STEP

E	MODIFY CLAMP ORIENTATION, ADD NOTE 10 (PAR16-527) UPDATE WEIGHT DUE TO -141 CHANGE	ML	17.02.10
D	D5123-3 CLAMP CUSHION WAS D5123-9 CLAMP CUSHION, MS21920-22 WAS -24.	AP	15.01.19
C	RE-DESIGN STEP INSTALLATION	DB	14.11.24
B	D5149-043 WAS D5149-041, AN4C6A WAS AN4C10A, D2274 WAS D5153-1	AP	14.11.04
A	NEW ISSUE	AP	14.09.03
REV.	DESCRIPTION	BY	DATE
DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D119-796-151 TITLE XTUBE ASSY (AW119 MKII FWD) SCALE NTS COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DRAWN	ML		
CHECKED	AJS		
MFG. APPR.	DP		
APPROVED	WM		
DE APPR.	DS	REV. E SHEET 1 OF 1	
DATE	17.02.10		

RELEASED
2017-05-04
ECN 17-538

APPROVED